

Multisensor with SelfVerify – BH-520

Interactive fire detection systems
Product datasheet

Features

- Interactive
- Ensures fast response to various fire developments
- Smoke detector for detection of combustion gases mainly consisting of visible (large) particles. Heat sensor assisting for early detection of flaming fires.
- Additional PCB coating, ideal in humid environments
- With DYFI+ adaptive and self learning function
- With SelfVerify function for reduced maintenance/testing and increased reliability
- Built-in thermistor for reading of temperature at the detector point
- Short circuit isolator in each detector
- Comprises a built-in alarm indicator (LED)
- Automatic addressing
- Proven technology
- EN 54-5/EN 54-7/EN 54-17
- Designed to meet the requirement of the major maritime classification societies

Application

BH-520 is a multisensor detector based on an optical point smoke detector combined with a temperature sensor. A rise in temperature will change the detection platform by increasing the smoke sensitivity in order to improve the detection of combustion gases from flaming fires producing barely a minimum of visible smoke particles. The multisensor principle combined with advanced signal processing in the detector ensures an early response to any type of fire development.

BH-520 is designed for use with Autronica's interactive fire detection systems. The DYFI+ intelligence combined with the SelfVerify functions and the allround smoke sensitivity of BH-320 makes this detector the obvious choice for demanding applications such as industrial, maritime and offshore installations where there is a potential flaming or/and smouldering fire hazard. The additional PCB coating makes this detector ideal in corrosive and humid environments.

Optionally there is a BH-520/N version for use in hazardous area zone 2. It must be connected to the BS-310/N loop driver. Does not require an isolator or a barrier unit.

Principle

Dual - 2 - sensor detector. Photoelectric, operating on the light scatter principle and temperature measurement by means of a thermistor.

SelfVerify: the detector's ability to initiate alarm is regularly checked.



Versions

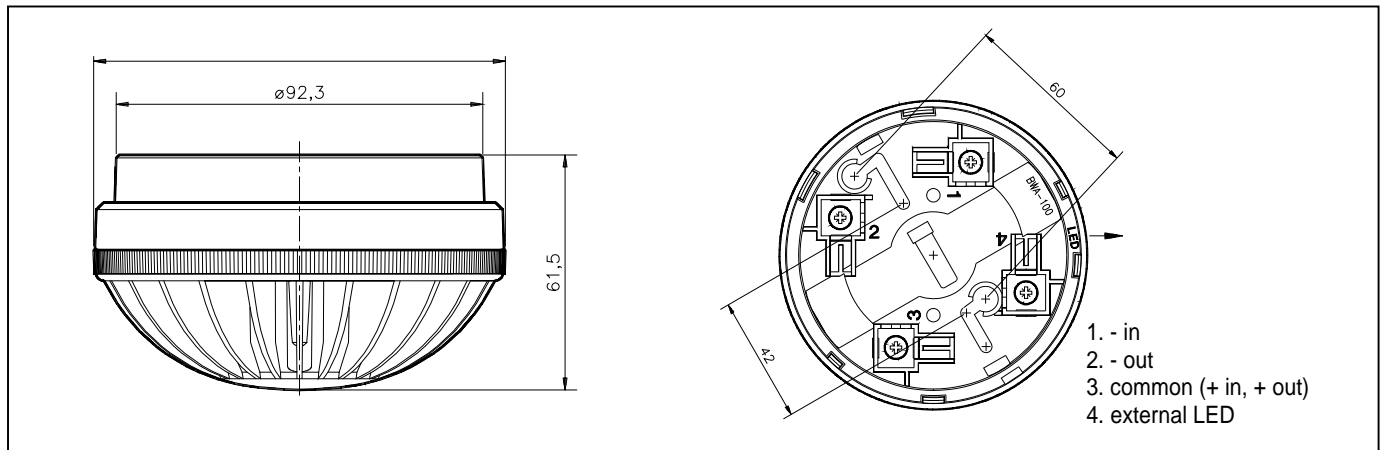
- BH-220* Multisensor without SelfVerify
- BH-320* Multisensor with SelfVerify
- BH-520 Multisensor with SelfVerify, environmentally protected.
- BH-520/Ex* Multisensor with SelfVerify, EExia-version for use in all zones.
- BH-520/N Multisensor with SelfVerify, EExn-version for use in zone 2 only.

*See separate data sheet.

| Technical specifications | |
|---------------------------|--------------------|
| Weight | 165 g |
| Material | PC/ABS |
| Colour | White |
| Sensitivity | Ref. table 1 and 2 |
| Voltage | 10 – 27 VDC |
| Current consumption | |
| Stand by: | < 0,3mA |
| External alarm indicator: | 6mA |
| CPD certificate | 1134-CPD-017 |
| Degree of protection | IP44D |
| Working temperature | - 20 - + 70°C |
| Humidity (non condensing) | Max. 95% RH |
| Maintenance | None |
| Service | Replace if faulty |
| Approvals | See web site |



Dimensions/Connections



Use of LED output

When LED or other equipment is connected to the LED output, a varistor - Siemens SIOVS07K25 (39V) -Autronica part. no. 116-8464-003.5039, is required between terminals 1 and 4 in base.

The LED is connected between terminals 3 and 4, terminal 3 being the positive terminal.

Table 1 – Performance classes

| Performance class | Typical application |
|-------------------|---------------------|
| Clean | Computer rooms |
| Normal | Offices |
| Normal 2 | Restaurants |
| Industry | Workshops |

Table 2 – Operation classes

| Operation class | Alarm type |
|--------------------|-----------------------------|
| Multisensor w/heat | Smoke alarm and heat alarm |
| Multisensor | Smoke alarm (heat assisted) |
| Heat only | Heat alarm (class A1) |

| Part number | Description |
|----------------|--|
| 116-BWA-100 | Detector base |
| 116-BHH-520 | Detector head |
| 116-BHH-520/N | Detector head certified for use in hazardous area zone 2 |
| 116-BWP-100/20 | Optional conduit box for M20 glands |
| 116-BWP-100/25 | Optional conduit box for M25 glands |
| 116-BBR-52 | Optional audible indicator – SmartBuzzer |

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